**Homework 52** Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Congruent Triangles AAS, SSA, AAA** Period:\_\_\_\_Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Directions: Show all your work and write in complete sentences when needed.

For #1- 6, determine if the two triangles are congruent. If so, write a congruency statement and identify what postulate is needed to prove congruency.

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| --- | --- | --- | --- |
| 1) | 2) | | 3) |
| 4) | | 6) | |

For #6-11, determine if the two triangles are congruent. If so, write a congruency statement and identify what postulate is needed to prove congruency.

|  |  |  |
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| 6) | 7) | 8) |
| 9) | 10) | 11) |

**Mixed Review**

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| 1) What are the values that would make the following expression undefined? | 2) What is the distance between the following two points?  (-2, 2) (1, -2) |
| 5) An equation of a line in the (x, y) coordinate plane is given as:  -2x – 6 = 8y   1. What is the slope of this line? 2. At what point (x, y) will this line cross the x-axis? 3. At what point (x, y) will this line cross the y-axis? | 6) The points (4, 5) and (7, 10) are on line *a*. Find the equation for the line that is parallel to line *a* and passes through point (0, 5). |
| 7) Simplify: | 8) If , then x =? |